



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No: 09/217,595

Filed: December 22, 1998

Inventor(s):

Jaron Z. Lanier,
Jean-Jacques G. Grimaud,
Young L. Harvill,
Ann Lasko-Harvill,
Chuck L. Blanchard,
Mark L. Oberman, and
Michael A. Teitel

Examiner: Unknown

Group/Art Unit: 2784

Atty. Dkt. No: 5181-10802
P3045C1

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, DC 20231, on the date indicated below.

Dan R. Christen

Name of Registered Representative

6/21/99

Date

Signature

Title: METHOD AND SYSTEM
FOR GENERATING
OBJECTS FOR A MULTI-
PERSON VIRTUAL WORLD
USING DATA FLOW
NETWORKS

**CERTIFICATION UNDER 37 C.F.R. § 3.73(b); CONSENT BY ASSIGNEE
UNDER 37 C.F.R. § 172; OFFER TO SURRENDER LETTERS PATENT**

I, the undersigned, certify that I am an individual empowered to act on behalf of Sun Microsystems, Inc., the assignee of the entire right, title and interest of the above-identified application by virtue of the following assignments (copies of which are attached hereto):

(a) an assignment indicating a conveyance of U.S. Patent Application Serial No. 07/535,253, filed June 7, 1990, entitled "VIRTUAL REALITY NETWORK" from inventors Jaron Z. Lanier, Jean-Jacques Grimaud, Young Harvill, Ann Lasko-Harvill, Chuck Blanchard, Mark Oberman, and Michael Teitel to VPL Research, Inc. (recorded in the U.S. Patent Office at Reel 5425, Frame 0673), wherein U.S. Patent No. 5,588,139, which issued on December 24, 1996, entitled "METHOD AND SYSTEM FOR GENERATING OBJECTS FOR A MULTI-PERSON VIRTUAL WORLD USING DATA FLOW NETWORKS" is a continuation of U.S. Patent Application Serial No. 07/535,253 (for convenience, a copy of the first page of said letters patent is attached hereto);

(b) an assignment indicating a conveyance of U.S. Patent No. 5,588,139 from VPL Research, Inc. to VPL Newco, Inc. (recorded in the U.S. Patent Office at Reel 9279, Frame 0873); and

(c) an assignment indicating a conveyance of U.S. Patent No. 5,588,139 from VPL Newco, Inc. to Sun Microsystems, Inc. (recorded in the U.S. Patent Office at Reel 9279, Frame 0877).

I further certify that:

(a) I have reviewed the assignments noted above, and that to the best of my knowledge and belief, title is in the above-noted assignee;

(b) The assignee consents to the filing of Reissue Application No. 09/217,595 for the reissue of U.S. Patent No. 5,588,139; and

(c) The assignee hereby offers to surrender said letters patent as part of the reissue application.

I hereby declare that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issue thereon.

Date: 4/22/99

Sun Microsystems, Inc.

By: 

Name: Kenneth Olson

Title: Vice-President for
Intellectual Property



4

**REISSUE APPLICATION DECLARATION
AND POWER OF ATTORNEY BY INVENTORS**

As a sole named Inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, I believe I am an original, first, joint inventor of the subject matter that is described and claimed in letters patent number 5,588,139, granted on December 24, 1996, and for which invention I solicit a reissue patent on the invention entitled "METHOD AND SYSTEM FOR GENERATING OBJECTS FOR A MULTI-PERSON VIRTUAL WORLD USING DATA FLOW NETWORKS," the specification of which

- ☐ is attached hereto.
- ☒ was filed on December 22, 1998, as reissue application number 09/217,595 and is amended in the Preliminary Amendment submitted herewith.
- ☐ I hereby declare that there is no assignee for this application.

**STATEMENT OF INOPERATIVENESS OR INVALIDITY
OF ORIGINAL PATENT UNDER 37 C.F.R. § 1.175**

I believe the original patent to be

- ☒ partly
- ☐ wholly

inoperative or invalid by reason of (37 C.F.R. § 1.175(a)(1)):

(check all items that may apply)

- ☒ a defective specification
- ☐ a defective drawing
- ☒ the patentee claiming more or less than the patentee had a right to claim in the patent.

NOTE: At least one error must be relied upon as the basis for the reissue. 37 C.F.R. § 1.175(a)(1).

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Applicant(s) believe that the "errors" listed above, and all other "errors" which are being corrected, up to the time of the filing of this reissue declaration, arose without any deceptive intention on the part of the applicant(s). 37 C.F.R. § 1.175(a)(2).

NOTE: For any error corrected not covered by this declaration applicant must submit, before allowance, a supplemental declaration stating that every such error arose without any deceptive intention on the part of the applicant. 37 C.F.R. § 1.175(b)(1).

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

(37 C.F.R. 6 1.175)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information that is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

☐ In compliance with this duty, there is attached an information disclosure statement in accordance with 37 C.F.R. § 1.98.

POWER OF ATTORNEY

I hereby revoke any previous Powers of Attorney and appoint the following practitioner(s):

Kenneth Olsen	Reg. No. 26,493
Matthew C. Rainey	Reg. No. 32,291
Timothy J. Crean	Reg. No. 37,116
Philip J. McKay	Reg. No. 38,966
Robert S. Hauser	Reg. No. 37,847
Joseph T. FitzGerald	Reg. No. 33,881
Alexander E. Silverman	Reg. No. 37,940

each of said attorneys being employed by Sun Microsystems, and

I hereby revoke any previous Powers of Attorney and appoint the following practitioner(s):

Mark L. Berrier	Reg. No. 35,066
Cyrus F. Bharucha	Reg. No. 42,324
Dan R. Christen	Reg. No. 39,943
Timothy S. Corder	Reg. No. 38,414
Kevin L. Daffer	Reg. No. 34,146
Jeffrey C. Hood	Reg. No. 35,198

Louis H. Iselin	Reg. No. 42,684
B. Noël Kivlin	Reg. No. 33,929
Robert C. Kowert	Reg. No. 39,255
Lawrence J. Merkel	Reg. No. 41,191
Eric B. Meyertons	Reg. No. 34,876
Eric A. Stephenson	Reg. No. 38,321
David A. Rose	Reg. No. 26,223

each of said attorneys or agents being members or associates of the firm of Conley, Rose & Tayon, P.C., as attorney or agent for so long as they remain with such company or firm, with full power of substitution and revocation, to prosecute the application, to make alterations and amendments therein, to transact all business in the Patent and Trademark Office in connection therewith, and to receive the Letters Patent.

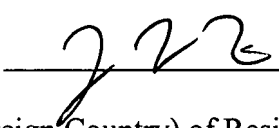
Please direct all communications as follows:

Dan R. Christen
Conley, Rose & Tayon, P.C.
P.O. Box 398
Austin, Texas 78767-0398
Ph: (512) 703-1429

SIGNATURES

I hereby declare that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Inventor's Full Name: Jaron Z. Lanier
(First) (Initial) (Last)

Inventor's Signature:  Date: MAY 23 1999

City and State (or Foreign Country) of Residence: SAN JUANITO, CA Citizenship: USA

Post Office and Residence Address: Box 2842 SAN JUANITO CA 94966
(Include number, street name, city, state and zip code)

Inventor's Full Name: Jean-Jacques G. Grimaud
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: France

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Young L. Harvill
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Ann Lasko-Harvill
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Chuck L. Blanchard
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Mark L. Oberman
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Michael A. Teitel
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)



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Inventor's Full Name: Jean-Jacques G. Grimaud
(First) (Initial) (Last)

Inventor's Signature:  Date: 6/10/99

City and State (or Foreign Country) of Residence: New York, NY Citizenship: France

Post Office and Residence Address: 189 W. 89th St., Apt. 12D, New York, NY 10024
(Include number, street name, city, state and zip code)

Inventor's Full Name: Young L. Harvill
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
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Inventor's Full Name: Ann _____ Lasko-Harvill
(First) (Initial) (Last)

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Inventor's Full Name: Chuck L. Blanchard
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Inventor's Full Name: Michael A. Teitel
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Inventor's Full Name: Jaron Z. Lanier
 (First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
 (Include number, street name, city, state and zip code)

Inventor's Full Name: Jean-Jacques G. Grimaud
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: France

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Young L. Harvill
(First) (Initial) (Last)

Inventor's Signature:  Date: 2.23.99

City and State (or Foreign Country) of Residence: San Mateo, California Citizenship: U.S.A.

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Inventor's Full Name: Ann Lasko-Harvill
(First) (Initial) (Last)

Inventor's Signature:  Date: 3/19/99

City and State (or Foreign Country) of Residence: San Mateo, California Citizenship: U.S.A.

Post Office and Residence Address: 1784 Hamlet Street, San Mateo, California 94403
(Include number, street name, city, state and zip code)

Inventor's Full Name: Chuck L. Blanchard
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Mark L. Oberman
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Michael A. Teitel
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: 1250 Crestlake Avenue, Ventura, California 93004
(Include number, street name, city, state and zip code)



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- ☒ a defective specification
- ☐ a defective drawing
- ☒ the patentee claiming more or less than the patentee had a right to claim in the patent.

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Applicant(s) believe that the "errors" listed above, and all other "errors" which are being corrected, up to the time of the filing of this reissue declaration, arose without any deceptive intention on the part of the applicant(s). 37 C.F.R. § 1.175(a)(2).

NOTE: For any error corrected not covered by this declaration applicant must submit, before allowance, a supplemental declaration stating that every such error arose without any deceptive intention on the part of the applicant. 37 C.F.R. § 1.175(b)(1).

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

(37 C.F.R. 6 1.175)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information that is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

☐ In compliance with this duty, there is attached an information disclosure statement in accordance with 37 C.F.R. § 1.98.

POWER OF ATTORNEY

I hereby revoke any previous Powers of Attorney and appoint the following practitioner(s):

Kenneth Olsen	Reg. No. 26,493
Matthew C. Rainey	Reg. No. 32,291
Timothy J. Crean	Reg. No. 37,116
Philip J. McKay	Reg. No. 38,966
Robert S. Hauser	Reg. No. 37,847
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Alexander E. Silverman	Reg. No. 37,940

each of said attorneys being employed by Sun Microsystems, and

I hereby revoke any previous Powers of Attorney and appoint the following practitioner(s):

Mark L. Berrier	Reg. No. 35,066
Cyrus F. Bharucha	Reg. No. 42,324
Dan R. Christen	Reg. No. 39,943
Timothy S. Corder	Reg. No. 38,414
Kevin L. Daffer	Reg. No. 34,146
Jeffrey C. Hood	Reg. No. 35,198

Inventor's Full Name: Jean-Jacques G. Grimaud
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: France

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Young L. Harvill
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

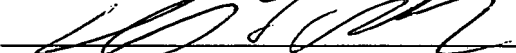
Inventor's Full Name: Ann Lasko-Harvill
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Chuck L. Blanchard
(First) (Initial) (Last)

Inventor's Signature:  Date: 6/24/99

City and State (or Foreign Country) of Residence: San Francisco, CA Citizenship: U.S.A.

Post Office and Residence Address: 1489 Webster St., Apt. 704, San Francisco, CA 94115
(Include number, street name, city, state and zip code)

Inventor's Full Name: Mark L. Oberman
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

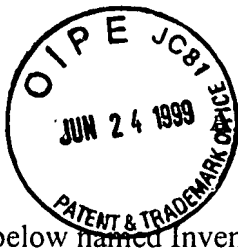
Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Michael A. Teitel
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)



**REISSUE APPLICATION DECLARATION
AND POWER OF ATTORNEY BY INVENTORS**

As a below named Inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name, I believe I am an original, first, joint inventor of the subject matter that is described and claimed in letters patent number 5,588,139, granted on December 24, 1996, and for which invention I solicit a reissue patent on the invention entitled "METHOD AND SYSTEM FOR GENERATING OBJECTS FOR A MULTI-PERSON VIRTUAL WORLD USING DATA FLOW NETWORKS," the specification of which

- ☐ is attached hereto.
- ☒ was filed on December 22, 1998, as reissue application number 09/217,595 and is amended in the Preliminary Amendment submitted herewith.
- ☐ I hereby declare that there is no assignee for this application.

**STATEMENT OF INOPERATIVENESS OR INVALIDITY
OF ORIGINAL PATENT UNDER 37 C.F.R. § 1.175**

I believe the original patent to be

- ☒ partly
- ☐ wholly

inoperative or invalid by reason of (37 C.F.R. § 1.175(a)(1)):

(check all items that may apply)

- ☒ a defective specification
- ☐ a defective drawing
- ☒ the patentee claiming more or less than the patentee had a right to claim in the patent.

NOTE: At least one error must be relied upon as the basis for the reissue. 37 C.F.R. § 1.175(a)(1).

Applicants note that a change or departure from the original specification or claims represents an “error” in the original patent under 35 U.S.C. 251. One such “error” in the original patent relates to the original claims. Filed with this declaration is a Preliminary Amendment that corrects a number of “errors” in the original specification and claims. In particular, in claim 1, line 25, the phrase [the first input unity] should be changed to --the first input units--. In column 1, line 38, the phrase [the users head] should be changed to --the user’s head--. In column 4, line 26, the phrase [the participants are] should be changed to --the participant is--. In column 8, line 8, the word [phoneline] should be changed to --phone line--. In column 8, line 16, the word [alogorithimically] should be changed to --algorithmically--.

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Yet another “error” is corrected by new claims 31-76, which are directed, at least partially, toward a computer software program. There are no computer software program claims recited in the original patent due to the insufficiency of the original claims.

Applicant(s) believe that the "errors" listed above, and all other "errors" which are being corrected, up to the time of the filing of this reissue declaration, arose without any deceptive intention on the part of the applicant(s). 37 C.F.R. § 1.175(a)(2).

NOTE: For any error corrected not covered by this declaration applicant must submit, before allowance, a supplemental declaration stating that every such error arose without any deceptive intention on the part of the applicant. 37 C.F.R. § 1.175(b)(1).

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

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Eric B. Meyertons	Reg. No. 34,876
Eric A. Stephenson	Reg. No. 38,321
David A. Rose	Reg. No. 26,223

each of said attorneys or agents being members or associates of the firm of Conley, Rose & Tayon, P.C., as attorney or agent for so long as they remain with such company or firm, with full power of substitution and revocation, to prosecute the application, to make alterations and amendments therein, to transact all business in the Patent and Trademark Office in connection therewith, and to receive the Letters Patent.

Please direct all communications as follows:

Dan R. Christen
 Conley, Rose & Tayon, P.C.
 P.O. Box 398
 Austin, Texas 78767-0398
 Ph: (512) 703-1429

SIGNATURES

I hereby declare that all statements made of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Inventor's Full Name: Jaron Z. Lanier
 (First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: _____

Post Office and Residence Address: _____
 (Include number, street name, city, state and zip code)

Inventor's Full Name: Jean-Jacques G. Grimaud
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: France

Post Office and Residence Address: _____
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(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

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Inventor's Full Name: Ann Lasko-Harvill
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
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Inventor's Full Name: Chuck L. Blanchard
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Inventor's Signature: _____ Date: _____

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Inventor's Full Name: Mark L. Oberman
(First) (Initial) (Last)

Inventor's Signature: Mark Oberman Date: 5-28-99

City and State (or Foreign Country) of Residence: Sunnyvale, CA Citizenship: U.S.A.

Post Office and Residence Address: 810 Devonshire Way, Sunnyvale CA 94087
(Include number, street name, city, state and zip code)

Inventor's Full Name: Michael A. Teitel
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

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Inventor's Full Name: Jaron Z. Lanier
 (First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
 (Include number, street name, city, state and zip code)

Inventor's Full Name: Jean-Jacques G. Grimaud
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: France

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Young L. Harvill
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: San Mateo, California Citizenship: U.S.A.

Post Office and Residence Address: 1784 Hamlet Street, San Mateo, California 94403
(Include number, street name, city, state and zip code)

Inventor's Full Name: Ann Lasko-Harvill
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: San Mateo, California Citizenship: U.S.A.

Post Office and Residence Address: 1784 Hamlet Street, San Mateo, California 94403
(Include number, street name, city, state and zip code)

Inventor's Full Name: Chuck L. Blanchard
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

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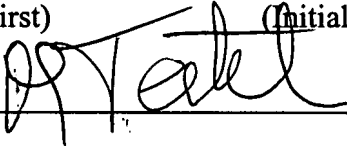
Inventor's Full Name: Mark L. Oberman
(First) (Initial) (Last)

Inventor's Signature: _____ Date: _____

City and State (or Foreign Country) of Residence: _____ Citizenship: U.S.A.

Post Office and Residence Address: _____
(Include number, street name, city, state and zip code)

Inventor's Full Name: Michael A. Teitel
(First) (Initial) (Last)

Inventor's Signature:  Date: 5/19/94

City and State (or Foreign Country) of Residence: Ventura CA Citizenship: U.S.A.

Post Office and Residence Address: 1250 Crestlake Avenue, Ventura, California 93004
(Include number, street name, city, state and zip code)